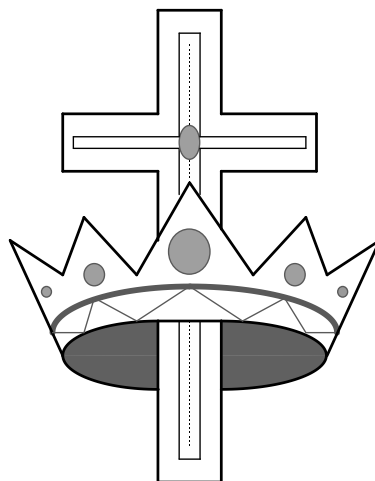


SS Mary and Michael Catholic Primary School

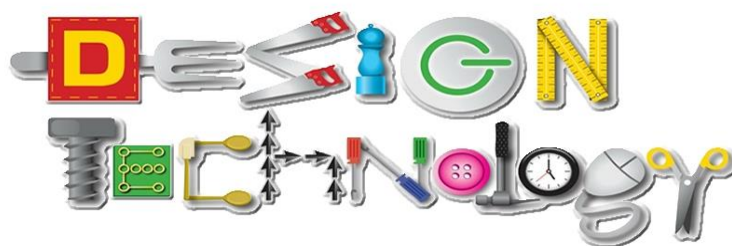
Design and Technology Policy

Written	September 2023
Updated	September 2024



We are unique and can reach our full potential in the
Loving Family of SS Mary and Michael Catholic
Primary School.

Walking with Jesus, caring for each other we learn
together in the warmth of our school home.



Design & Technology Statement of Intent

Our Intent

Our intent for Design and Technology (DT) at St Mary & St Michael CP is to ensure pupils are aware of the real-world purposes and application for their DT knowledge, to solve problems in response to consumer requirements. Each unit works through a variety of stages to meet a specific design need.

The '**design**' stage seeks to embed understanding of product research, the importance of consumer opinions and requirements and exploring movements and mechanisms in order to help generate informed ideas. The '**make**' stage gives pupils opportunities to explore tools and materials and progress to making informed design choices for their intended products. The '**evaluate**' stage helps develop critical, reflective thinkers judging their work against design criteria and consumer needs.

This cycle is underpinned by an exploration of technical knowledge to enable the pupils to develop the subject-specific skills and knowledge needed not only to fulfil the requirements of the design need but to ensure that these skills progress and are built on throughout the school.

We intend our children to see themselves as having an important role in society, know how they can contribute to it and be encouraged to have curiosity about DT. We intend for them to be prepared for the next stage of learning and have a desire for lifelong learning that may develop into future occupations or hobbies within this area.

THE CURRICULUM

Design & Technology National Curriculum Aims

At St Mary & St Michael's, we aim to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook

In EYFS, provision should enable pupils to:

Explore and play with a range of media and materials, as well as providing opportunities for sharing ideas and feelings through a variety of activities in design and technology, movement, role-play and art. The children will be encouraged to explore materials and tools throughout all of their projects.

Although some tasks will be verbal communication (such as evaluating) every effort will be to increase the formalities of recording each stage of work. Photographic evidence of work (or video files of verbal work) will be taken, collected and stored in the shared area.

In Key Stage 1, pupils should be taught:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an interactive process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- To design purposeful, functional, appealing products for themselves and other users based on design criteria
- To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- To explore and evaluate a range of existing products
- To evaluate their ideas and products against design criteria Technical knowledge
- To build structures, exploring how they can be made stronger, stiffer and more stable
- To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

In Key Stage 2, pupils should be taught:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an interactive process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- To further model and communicate ideas through discussion, annotated sketches/diagrams and prototypes and further develop design criteria, through research, to inform the design of innovative, functional, appealing products that are fit for a purpose.

Make

- To select and use a wider range of tools and equipment to perform practical tasks accurately and select and use a wider range of materials and components, according to their functional properties and aesthetic qualities.

Evaluate

- To investigate and analyse a range of existing products to inform ideas and then to evaluate ideas and products against their own design criteria and views of others to improve their work. Throughout, understanding how key events and individuals in design and technology have helped shape the world we have today.

Cooking and Nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Curriculum Implementation

Teaching & Learning

At St Mary & St Michael's Design Technology is delivered as a discrete subject and, wherever possible, cross curricular links are formed. Design Technology links well with many other subjects, such as Art, Maths, Computing and Science and teachers carefully plan these links to ensure they are meaningful.

To ensure high standards of teaching and learning in Design and Technology, we implement a curriculum that is progressive throughout the whole school. Teachers use the progression document to ensure the curriculum is covered and the skills/knowledge taught is progressive from year group to year group.

Units of work are carefully organised on the school's DT long term plan so that over the course of each key stage children will experience projects on food technology, structures, textiles (sometimes linked to art) mechanisms and electrical systems. The skills and knowledge have been allocated to year groups and revisited to ensure progression and coverage.

Each year group should carry out Design, Make, Evaluate projects over the course of the school year- one being food and nutrition.

In KS1 and 2, DT is linked, where possible, with topics being studied that half term in dedicated DT subject sessions.

EYFS

In EYFS, learning in the specific area 'Expressive Arts & Design' and 'Physical development' takes place across every day indoors and outdoors.

Exploring and using media and materials: children sing song, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.

Physical development: children handle equipment and tools effectively for a purpose.

KS1 & KS2

In Key Stage 1 & 2, the National Curriculum programmes of study direct the content of teaching, with planning and progression support from the Design & Technology planning from Kapow. Teaching has a specific focus in each year group and is linked, where possible, to a topic therefore connecting it to a wider context. A Progression of Knowledge & Skills document has been written to ensure that the teaching of core and wider knowledge and development of skills is progressive across the school. Teachers plan for progression half-

termly, building on prior learning and plan specific learning opportunities enabling pupils to acquire knowledge, apply it through developing techniques, control and use of materials and tools with creativity, experimentation and an increasing awareness of different kinds of design and technology to create informed, purposeful and appealing products.

Assessment and Reporting to Parents

Teacher assessment – This is ongoing in lessons and on the completion of a topic. Throughout school, questioning, observation of work and approaches used, pupils' responses to their own and each other's work, and final outcomes evidenced in books/final product all inform the assessment process

Self and peer assessment – Opportunities for this are used at the end of topics involving positive and constructive critique of their own work, and that of others.

Reporting to parents – Comments regarding progression against the age-related expectations for this subject are reported to parents as part of the end of year report.

Monitoring

The Curriculum leader, alongside SLT, is responsible for monitoring and evaluating curriculum progress.

This is done through:

- work scrutiny,
- planning scrutiny,
- resource audits,
- learning walks which involve lesson observation drop-ins,
- pupil interviews,
- subject-knowledge audits with staff.

Priorities for 2023-24

Priority 1: Ensure that the D&T curriculum - and the teaching of it – drives progress.

Priority 2: Ensure that equipment and resources for staff and pupils are audited to ensure that they are fit for purpose.

Priority 3: To look into Kapow as an aid to support staff in their planning & teaching of DT.

Priority 4: Ensure that the curriculum shows a progression of skills across the school.